I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below

Dated: August 18, 2004

Signature:

Docket No.: CELLTH 3.0-003 CONT CONT XI (PATENT)

Group Art Unit: 1616

Examiner: A. N. Pryor

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Warrell et al.

Application No.: 10/759,293

Filed: January 16, 2004

For: PROCESS FOR PRODUCING ARSENIC

TRIOXIDE FORMULATIONS AND

METHODS FOR TREATING CANCER USING ARSENIC TRIOXIDE OR MELARSOPROL

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## REQUEST FOR CONSIDERATION OF INFORMATION UNDER 37 CFR § 1.97 (C)

Dear Sir:

It is respectfully requested that the references cited in the enclosed form be considered pursuant to 37 C.F.R. § 1.97(c). Please charge Deposit Account No. 12-1095 in the amount of \$180.00 pursuant to 37 C.F.R. § 1.17(p). In the event that any additional fee is due in connection with the present request, the same should be charged to our Deposit Account No. 12-1095.

Dated: August 18, 2004

Respectfully submitted,

Registration No.: 33,071

LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP

600 South Avenue West

Westfield, New Jersey 07090

(908) 654-5000

Shawn P. Foley

Attorney for Applicant

AUG 2 4 2004 U

The example of this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Signature:

Dated: August 18, 2004

main (P.

Docket No.: CELLTH 3.0-003 CONT CONT XI (PATENT)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Warrell et al.

Application No.: 10/759,293

Group Art Unit: 1616

Filed: January 16, 2004

Examiner: A. N. Pryor

For: PROCESS FOR PRODUCING ARSENIC

TRIOXIDE FORMULATIONS AND

METHODS FOR TREATING CANCER USING ARSENIC TRIOXIDE OR MELARSOPROL

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## INFORMATION DISCLOSURE STATEMENT

Dear Sir:

It is respectfully requested that the references listed on the enclosed form be made of record and considered with respect to the above-referenced U.S. patent application. A copy of each reference was of record in United States Patent 6,723,351, the benefit of which is claimed under §120. Submission of the present Information Disclosure Statement should not be taken as an admission that the cited references are legally available prior art or that the same are pertinent or material.

In the event that any fee is due in connection with the present Information Disclosure Statement, the Commissioner is hereby authorized to charge the same to our Deposit Account Application No.: 10/759,293 Docket No.: CELLTH 3.0-003 CONT CONT XI

No. 12-1095.

Dated: August 18, 2004

Respectfully submitted,

Shawn P. Foley

Registration No.: 33,071

LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP

600 South Avenue West

Westfield, New Jersey 07090

(908) 654-5000

Attorney for Applicant

510383\_1.DOC

Sub	ostitute for form 1449A/B/P	то		Complete if Known		
	ound to remain the remain	. •		Application Number	10/759,293	
11	NFORMATIO	N DI	SCLOSURE	Filing Date	January 16, 2004	
S	TATEMENT	BY A	APPLICANT	First Named Inventor	Raymond P. Warrell, Jr.	
				Art Unit	1616	
	(Use as many s	heets as	s necessary)	Examiner Name	A. N. Pryor	
Sheet	Sheet 1 of 5		Attorney Docket Number	CELLTH 3.0-003 CONT CONT XI		

OU.S. PATENT DOCUMENTS								
		Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear					
	AA**	US-132,275-B1	10-15-1872	Gettings	,			
	AB**	US-232,807	10-05-1886	Dennett				
	AC**	US-3,700,498	10-24-1972	Kanazawa et al.				
	AD**	US-4,497,780	02-05-1985	Barin et al.				
	AE**	US-5,759,837	06-02-1998	Kuhajda et al.				
	AF**	US-2002/0183385	12-05-2002	Ellison et al.				
	ÄG**	US-6,720,011	04-13-2004	Zhang, Ting-Dong				
	AH**	US-6,770,304	08-03-2004	Warrell et al.				
	AI**	US-2003/0099719	05/2003	Warrell et al.				
***************************************	+	US-6,723,351	04-20-2004	Warrell et al.				
	AK**	US-6,773,792	05-11-2004	Lu				

		FOREI	GN PATENT D	OCUMENTS		
Examiner	Cite	Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages	
Initials*	No.1	Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	MM-DD-YYYY	Applicant of Cited Document	or Relevant Figures Appear	T <sup>6</sup>
	BA	JP-51-88620	03-08-1976			
	BB	WO-95/01789	01-19-1995			
	BC	CN-1133725	10-23-1996			
	BD	CN-1131037	09-18-1996			
	BE	CN-1122700	05-22-1996			
	BF	CN-1081104	01-26-1994			
	BG	CN-1119113	03-27-1996			
	ВН	CN-1061908	06-17-1992			
	BI	CN-1121807	05-08-1996			
	BJ	CN-1079391	12-15-1993			
	BK	WO-94/02103	02-03-1994			
	BL	FR-2 539 993	03-31-1994			
	ВМ	DE-43 17 331	12-01-1994			
	BN	WO-95/22336	08-24-1995			
	во	LV-11667	06-20-1997			
	BP	WO-94/02108	02-03-1994			

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \*\*CITE NO.: Those patent(s) or publication(s) which are marked with an double asterisk (\*\*) next to the Cite No. are not supplied because they were previously cited by or submitted to the Office in a prior application relied upon in this application for an earlier filing date under 35 U.S.C. 120. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

	NON PATENT LITERATURE DOCUMENTS							
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²					
	CA	CUTLER et al., Article IV, American Journal of the Medical Sciences, pp. 74-84, January 1878						
	СВ	FORKNER et al., "Arsenic as a therapeutic agent in chronic myelogeneous leukemia", Jour.						

Examiner	Date	
Signature	 Considered	

Sul	ostitute for form 1449A/B/F	PTO		Complete if Known		
"		. •		Application Number	10/759,293	
l II	NFORMATIO	N DIS	CLOSURE	Filing Date	January 16, 2004	
l s	TATEMENT	BY A	PPLICANT	First Named Inventor	Raymond P. Warrell, Jr.	
				Art Unit	1616	
	(Use as many s	sheets as r	necessary)	Examiner Name	A. N. Pryor	
Sheet	heet 2 of 5		Attorney Docket Number	CELLTH 3.0-003 CONT CONT XI		

	A.M.A. 97(1):3-5, 1931
- 1	myelogenous leukemia", University of Rochester, pp. 1488-1502, 1936
	Council, pp. 192-251, 1947
	Zasshi, 86(4):653-675, 1971
	Academy of Sciences, 199:265-273, June 25, 1972
<del>                                     </del>	MONFARDINI et al., "Survival in chronic myelogenous leukemia: influence of treatment and
	extent of disease at diagnosis", Cancer 31: 492-501, 1973
	Tumor Growth and Cell-mediated Tumor Immunity", J. Environmental, Vol. 4, pp. 65-79, 1980.
	ISHINISHI, et al., "Study on Chronic Toxicity of Arsenic Trioxide in Rats with Special
	Reference to the Liver Damages", Fukuok Acta Medicine, 71:27, 1980
	CUZICK et al., "Medicinal Arsenic and Internal Malignancies", Br. J. Cancer, 45:904-911, 1982  QI and BI, "Method for Removing As <sub>2</sub> O <sub>3</sub> from Realgar, Chung Yao Tung Pao, 8(5):21-22, 1983
۱ ۱	M KASPER et al., "Hepatic Angiosarcoma and Bronchioloalveolar Carcinoma Induced by
l .	Fowler's Solution", JAMA 252(24):3407-3408, 1984
	ZHANG et al., "Clinical Study on the Treatment of Acute Promyelocytic Leukemia with Ai Ling
<del>                                     </del>	#1", J. of Traditional Chinese and Western Medicine, Vol. 4, No. 1, p. 19, 1984.
l '	PERSHAGEN et al., "On the Pulmonary Tumorigenicity of Arsenic Trisulfide and Calcium
l	Arsenate in Hamsters", Cancer Letters, 27:99-104, 1985
1	SHIMOTSUURA et al., "Studies on the Antineoplastic Actions of As <sub>2</sub> O <sub>3</sub> ", Shikwa Gakuho,
<del>                                     </del>	86:1237-1253, 1986
'	YAMAMOTO et al., "Tumorigenicity of Inorganic Arsenic Compounds Following Intratracheal
<del>                                     </del>	Instillations to the Lungs of Hamsters", Int. J. Cancer 40:220-223, 1987
	LEE et al., "Induction of Gene Amplification by Arsenic", Science, 241: 79-81, 1988
I ''	LI et al., "Traditional Chinese and Western Medicine in the Treatment of 27 Patients with
l	Malignant Lymphoma", Chinese J. Oncology, 10:61-62, 1988
	No. 1 in Combination with Chinese Medical Practice of Pattern Identification", Zhongguo
<b> </b>	Zhongxiyi Jiehe Zazhi, Vol. 12(3), 170-171, 1992  PENG, ZHANG et al., "Treatment of Acute Promyelocyte Leukemia with Intraveneous Arsenic
I ''	PENG, ZHANG et al., "Treatment of Acute Promyelocyte Leukemia with Intraveneous Arsenic Triovide". Chinese Journal of Hometology, Vol. 17, Translation, February 1996.
<del>                                     </del>	Trioxide", Chinese Journal of Hematology, Vol. 17, Translation, February 1996  Arsen (III)-Sulfid As <sub>2</sub> S <sub>2</sub> ", Gmelin's Arsenic, 8.sup.th Edition, 17:422-433, 1952
	Arsen (III)-outility As202, Ginetility Arsenic, 0.sup.th Edition, 17:442-455, 1902
	V Diarsendisulfid As <sub>2</sub> S <sub>2</sub> ", Gmelin's Arsenic, 8.sup.th Edition, 17:417-422, 1952
'	Goodman & Gilman's "The Pharmacological Basis of Therapeutics", Ninth Edition, McGraw-
	Hill, Health Professions Division, pp. 1659-1662  "Inorganic Arsenci Compounds Other Than Arsine Health and Safety Guide", Health and
l '	
l	Safety Guide No. 70," WHO, Geneva 1992
l l'	"Xionghyuang, Realgar", Chinese Pharmacopia (I), Guangdong Science and Technology
<b>.</b>	Publishing House, China, pp. 298-299, 1995
I '	AKAO et al., "Arsenic Induces Apoptosis in B-cell Leukemic Cell Lines in Vitro: Activation of
	Caspases and Down-regulation of Bcl-2 Protein", British J of Hematology, 102, 1055-1060,
<b>-</b>	1998 ©Blackwell Science Ltd.
I ''	ANDRE et al., "The PML and PML/RARα. Domains: From Autoimmunity to Molecular
	Oncology and From Retinoic Acid to Arsenic", Experimental Cell Research, 229:253-260, 1996
	©Academic Press, Inc. 1996
<u> </u>	Chemical Abstract, 63-Pharmaceuticals 11:317, 111:219272j and 111:219276p, 1987-1991

Examiner	Date
Signature	Considered

Sub	stitute for form 1449A/B/PT	0		Complete if Known		
		_		Application Number	10/759,293	
IN	<b>IFORMATION</b>	N DI	SCLOSURE	Filing Date	January 16, 2004	
S	TATEMENT I	BY A	APPLICANT	First Named Inventor	Raymond P. Warrell, Jr.	
				Art Unit	1616	
	(Use as many sh	eets as	necessary)	Examiner Name	A. N. Pryor	
Sheet	3	of	5	Attorney Docket Number	CELLTH 3.0-003 CONT CONT XI	

 ,	The state of the s	
CD1	CHEN et al., "In Vitro Studies on Cellular and Molecular Mechanisms of Arsenic Trioxide (As <sub>2</sub> O <sub>3</sub> ) in the Treatment of Acute Promyelocytic Leukemia: As <sub>2</sub> O <sub>3</sub> induces NB <sub>4</sub> Cell Apoptosis with Down Regulation of Bcl-2 Expression and Modulation of PML-RARa/PML proteins", Blood	
 	88(3): 1052-1061, Aug. 1996 .©American Society of Hematology 1996	
CE1	CHEN et al., "Use of Arsenic Trioxide (As <sub>2</sub> O <sub>3</sub> ) in the Treatment of Acute Promyelocytic Leukemia (APL):I. As <sub>2</sub> O <sub>3</sub> Exerts Dose-Dependent Dual Effects on APL Cells", Blood	
 	89(9):3345-3353, 1997 ©The American Society of Hematology 1997	
CF1	CHUNG et al., "Influence for Carcinoma Cell and Lymphatic Cell of Acetyl Arsonate", Yakhak Hoeji 40(5):599-607, 1996 (Abstract Only)	
CG1	DE THE "L'oxyde d'arsenic: apres l'acide retinoique, un nouveau traitement cible dela leucemie aigue promyelocytaire" Medecine/Sciences, 13:867-71, 1997	
CH1	Dictionary of Inorganic Compounds, vol. 1, Ac-C <sub>10</sub> , IC-0006667-IC-000671 (1992)	
CI1	FLAMIGNI et al. "Effect of Sodium Arsenite on the Induction and Turnover of Ornithine	
	Decarboxylase Activity in Erythroleukemia Cells", Cell Biochemistry and Function 7:213-217, 1989	
 CJ1	Fluka, 1995/96 Catalog: 152-153	
 CK1	GERMOLEC et al., "Arsenic Induces Overexpression of Growth Factors in Human Keratinocytes", Toxicology and Applied Pharmacology, 141:301-318, 1996 ©Academic Press,	
 014	Inc., 1996	-
CL1	HUANG et al., 1995, "The Clinical Study of QINGDAI Tablet for Treating Acute Promyelocytic Leukemia", China Magazine of Hematology, 16(1):26	
CM1	KONIG et al., "Comparative Activity of Melarsoprol and Arsenic Trioxide in Chronic B-Cell Leukemia Lines", Blood 90(2):562-570, 1997. ©The American Society of Hematology 1997	
CN1	KWONG et al., "Delicious Poison: Arsenic Trioxide for the Treatment of Leukemia", Blood 89:3487-8, 1997	
CO1	LU et al., "Effective treatment of AML-M3 (APL) and Their Remission Maintenance with Realgar: A Pilot Clinical and Laboratory Study on 38 Patients", Blood, 90 (10 Suppl. 1, part 1):416A, #1849, 1997	
CP1	LU et al., "Study of Reaglar in the Treatment of Acute Promyelocytic Leukemia (APL)-a pilot clinical and laboratory study on 32 Patients", China-Korea Medical Conference '97, 1997	
 CQ1	MERVIS, "Ancient Remedy Performs New Tricks", Science 273:578, 1996	
 CR1	NEUBAUER, "Arsenic Cancer: A Review", Arsenical Cancer, Arsenic Committee of the Medical Research Council, pp. 192-251, 1947	-
CS1	REICHL et al., "Effect of Arsenic on Cellular Metabolism after Single or Repeated Injection in Guinea Pigs", Arch. Toxicol, Suppl. 13, p. 363-65, 1989	-
 CT1	Remington's Pharmaceutical Sciences, Mack Publishing Co., Easton, PA, pp. 1570-1580, 1990	
CU1	SCHENK, Handbook of Preparative Inorganic Chemistry, 1:603, G. Brauer, Ed., Academic Press, New York, 2.sup.nd Edition, 1963	
 CV1	SHEN et al., "Use of Arsenic Trioxide (As <sub>2</sub> O <sub>3</sub> ) in the Treatment of Acute Promyelocytic Leukemia (APL):II Clinical Efficacy and Pharmacokinetics in Relapsed Patients", Blood 89(9):3354-3360, 1997 ©The American Society of Hematology 1997	
CW1	SOIGNET et al., "Complete Remission after Treatment of Acute Promyelocytic Leukemia with Arsenic Trioxide", J of Medicine 339:19, 1998. @Massachusetts Medical Society 1998	
CX1	TRELEAVEN et al., "Arsenic and Ayurveda", Leukemia and Lymphoma, 10:343-345, 1993	
CY1	USP Dictionary of USAN and International Drug Names, United States Pharmacopeial Conventions, Inc., Rockville, MD p. 59, Nov. 1994.	
 CZ1	WANG et al., "Studies on Chemically Preventing Leukemia", Ghung Hua Chung Liu Tsa Chih, 11(3):207-210, 1989	
CA2	XIANG et al., "60 Cases of Treating Acute Promyelocytic Leukemia by QINGDAI Tablet", Med. J. Chin. PLA 20(3):227-229,1995	

Examiner	Date	
Signature	Considered	

Sub	stitute for form 1449A/E	R/PTO		Complete if Known		
Out	Stitute for form 1440, 12			Application Number	10/759,293	
IN	IFORMATION	ON DIS	CLOSURE	Filing Date	January 16, 2004	
S	TATEMENT	ГВҮ А	PPLICANT	First Named Inventor	Raymond P. Warrell, Jr.	
				Art Unit	1616	
	(Use as many	sheets as n	ecessary)	Examiner Name	A. N. Pryor	
Sheet	4	of	5	Attorney Docket Number	CELLTH 3.0-003 CONT CONT XI	

CB2	YUAN et al., "Research on Traditional Methods for Purifying Realgar", Chung Yao Tung Pao, 13(8):23-26, 1988
CC2	YUAN et al., "Exploring Methods for Purifying Realgar", Chung Yao Tung Pao, 13(8):17-21,
CD2	ZHANG et al., "Traditional Chinese and Western Medicine in the Treatment of 27 Patients with
CE2	Malignant Lymphoma," Chinese J. Oncology, 10:61-62, 1988  ZHANG et al., "Treatment of Acute Promyelocytic Leukemia with "713": Clinical Observations
CF2	and Study of Action Mode on 117 patients", J. Harbin Medical Univ. 29(3):243, 1995  ZHANG et al., "Treatment of Acute Promyelocytic Leukemia with Intravenous Arsenic
	Trioxied", Chinese J. of Hematology 17(2) 1996
CG2	ZHU et al., "Arsenic-induced PML Targeting Onto Nuclear Bodies: implications for the treatment of acute promyelocytic leukemia", Proc. Natl. Acad. Sci. 94:3978-3983, 1997, ©The National Academy of Sciences of the USA 1997
CH2	"Letter on Historical Facts Regarding the Development of Ai Ling No. 1 and the Clinical Use of Arsenic Trioxide in the Treatment of Acute Promyelocytic Leukemia and a Study of It Mechanism", Heilongjiang Branch of the Chinese Medical Association, Mar. 27, 1998.
CI2	WANG et al., "Arsenic Trioxide and Melarsprol Induced Prgrammed Cell Death in Myeloid Leukemia Cell Lines and Function in PML and PNL-RARα Independent Manner", Blood, 92(5):1497-1504, 1998
CJ2	USP Dictionary of USAN and International Drug Names, United States Pharmacopeial Conventions, Inc., Rockville, MD, p. 59, Nov. 1995.
CK2	WANG et al., "Arsenic and the Treatment of Leukemia", J Harbin Medical Univ., vol. 31, No. 5, Oct. 1997
CL2	SMORENBURG et al., "Randomized Cross-Over Evaluation of Body-Surface Area-Based Dosing Versus Flat-Fixed Dosing of Paclitaxel", J. Clin. Oncology, 21:197-202 (2003)
CM2	VOISEN et al., "Extrapolation of Animal Toxicity to Humans: Interspecies Comparisons in Drug Development", Regulatory Toxicology and Pharmacology, 12:107-116 (1990)
CN2	FREIRICH et al., "Quantitative Comparison of Toxicity of Anticancer Agents in Mouse, Rat, Hamster, Dog, Monkey and Man", Cancer Chemotherapy Reports, 50:219-244 (1966)
CO2	GURNEY, "How to Calculate the Dose of Chemotherapy", Brit. J. Cancer, 86:1297-1302 (2001)
CP2	SHARKEY et al., "Body Surface Area Estimation in Children Using Weight Alone: Application in Paediatric Oncology", Brit. J. Cancer, 85(1):23-8 (2001)
CQ2	AU et al., "Arsenic Trioxide in Comparison with Chemotherapy and Bone Marrow Transplantation for the Treatment of Relapsed Acute Promyelocytic Leukaemia", Annals of Oncology, 14:752-757 (2003)
CR2	ZHANG et al., "Pathologic, Cytogenetic and Molecular Assessment of Acute Promyelocytic Leukemia Patients Treated with Arsenic Trioxide (As <sub>2</sub> O <sub>3</sub> )"; Modern Pathology; (2000); pp. 954-961
CS2	WESTERVELT et al.; "Sudden Death Among Patients with Acute Promyelocytic Leukemia Treated with Arsenic Trioxide"; Blood (2001); vol. 98, No. 2, pp. 266-271.
CT2	SOIGNET et al.; "United States Multicenter Study of Arsenic Trioxide in Relapsed Acute Promyelocytic Leukemia", Journal of Clinical Oncology, (2001), vol. 19, No. 18, pp. 3852-3880
CU2	WESERVELT et al., "Response and Toxicity Associated with Dose Escalation of Arsenic Trioxide in the Treatment of Resistant Acute Promyelocytic Leukemia", Blood 90 (10) (1997), p. 2496
CV2	SOIGNET et al., "Initial Clinical Study of a Novel Organic Arsenical, Melarsoprol, in Patients with Advanced Leukemia", Blood (W.B., Saunders, Philadelphia, PA), vol. 88, No. 10, p. 219A (ISSN: 0006-4971) (1996)

Examiner	Date
Signature	Considered

Substitute for form 1449A/B/PTO				Complete if Known		
Cub	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			Application Number	10/759,293	
IN	<b>IFORMATION</b>	I DI	SCLOSURE	Filing Date	January 16, 2004	
STATEMENT BY APPLICANT				First Named Inventor	Raymond P. Warrell, Jr.	
				Art Unit	1616	
(Use as many sheets as necessary)			necessary)	Examiner Name	A. N. Pryor	
Sheet	5	of	5	Attorney Docket Number	CELLTH 3.0-003 CONT CONT XI	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Examiner	Date	
Signature	 Considered	

<sup>&</sup>lt;sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.